Seria	Changed a file from non-ASCII to ASCII ENTERED RECEIVE													
	Changed the margins in cases where the sequence text was "wrapped" down to the next line.													
	Edited a format error in the Current Application Data section, specifically:													
	TECH CENTER 160 Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other													
	Added the mandatory heading and subheadings for "Current Application Data".													
	Edited the "Number of Sequences" (ield. The applicant spelled out a number instead of using an integer.													
	Changed the spelling of a mandatory field (the headings or subheadings), specifically:													
	Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:													
	Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:													
	Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.													
	Inserted colons after headings/subheadings. Headings edited included:													
	Deleted extra, invalid, headings used by an applicant, specifically:													
	Deleted: non-ASCII "garbage" at the beginning end of files? secretary initials/filename at end of file; page numbers throughout text; other invalid text, such as													
	Inserted mandatory headings, specifically:													
	Corrected an obvious error in the response, specifically:													
	Edited identifiers where upper case is used but lower case is required, or vice versa.													
	Corrected an error in the Number of Sequences field, specifically:													
	A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.													
	Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a Patentin bug). Sequences corrected:													
	Other:													

^{*}Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

1644

RAW SEQUENCE LISTING DATE: 12/12/2000 PATENT APPLICATION: US/08/737,904G TIME: 12:20:09

Input Set : A:\Pto.amc

Output Set: N:\CRF3\12122000\H737904G.raw

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3 <110> APPLICANT: Griffith, Irwin J et al.
 5 <120> TITLE OF INVENTION: T CELL EPITOPES OF RYEGRASS POLLEN ALLERGEN
 7 <130> FILE REFERENCE: TMI-040CP3
9 <140> CURRENT APPLICATION NUMBER: 08/737,904G
10 <141> CURRENT FILING DATE: 1996-11-20
12 <150> PRIOR APPLICATION NUMBER: 08/106,016
1.3 <151> PRIOR FILING DATE: 1993-08-13
15 <160> NUMBER OF SEQ ID NOS: 61
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21 <212> TYPE: DNA
22 <213> ORGANISM: Escherichia coli
24 <220> FEATURE:
25 <221> NAME/KEY: CDS
26 <222> LOCATION: (40)..(942)
28 <400> SEQUENCE: 1
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                                              3
                                                                   102
33 tac acg gtg get cta ttc etc gcc gtg gec ctc gtg gcg ggc ccg gcc
34 Tyr Thr Val Ala Leu Phe Leu Ala Val Ala Leu Val Ala Gly Pro Ala
                10
                                   1.5
                                                         20
35
37 gee tee tae gee get gae gee gge tae ace eee gea gee geg gee ace
                                                                    150
38 Ala Ser Tyr Ala Ala Asp Ala Gly Tyr Thr Pro Ala Ala Ala Ala Thr
              25
                                  30
41 ccg get act ect get gec acc ecg get geg get gga ggg aag geg acg
                                                                   198
42 Pro Ala Thr Pro Ala Ala Thr Pro Ala Ala Ala Gly Gly Lys Ala Thr 43 \phantom{-}40\phantom{+}45\phantom{+}50
45 acc gac gag cag aag ctg ctg gag gac gtc aac gct ggc ttc aag gca
46 Thr Asp Glu Gln Lys Leu Leu Glu Asp Val Asn Ala Gly Phe Lys Ala
47 55
                          60
                                            6.5
49 gec gtg gec get gec aac gec eet eeg geg gac aag tte aag ate
50 Ala Val Ala Ala Ala Asn Ala Pro Pro Ala Asp Lys Phe Lys Ile
           75
                                        80
53 ttc gag gee gee ttc tec gag tcc tec aag gge etc etc gee aec tec
                                                                   342
54 Phe Glu Ala Ala Phe Ser Glu Ser Ser Lys Gly Leu Leu Ala Thr Ser
                           95
57 gee gee aag gea eee gge ete ate eee aag ete gae aee gee tae gae
                                                                   390
58 Ala Ala Lys Ala Pro Gly Leu Ile Pro Lys Leu Asp Thr Ala Tyr Asp
            105 110
                                                  115
61 gtc gcc Lac aag gcc gcc gag ggc gcc acc ccc gag gcc aag tac gac
                                                                   438
62 Val Ala Tyr Lys Ala Ala Glu Gly Ala Thr Pro Glu Ala Lys Tyr Asp
                 1.25
                                       130
65 ged the gird act goo etc acc gaa geg etc ege gird atc ged gge ged
                                                                   486
66 Ala Phe Val Thr Ala Leu Thr Glu Ala Leu Arg Val Ile Ala Gly Ala
                         1.40
                                             145
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Sec P.

DATE: 12/12/2000 TIME: 12:20:09 RAW SEQUENCE LISTING PATENT APPLICATION: US/08/737,904G

Input Set : A:\Pto.amc
Output Set: N:\CRF3\12122000\H737904G.raw

											gag						534
		Clu	Val	His	Ala		Lys	Pro	Ala	Thr	Glu	GLu	Val	Pro	Ala		
	150					155					160					165	500
	-							_			gac	_		-			582
	Lys	TT6	Pro	Thr	_	GLu	Leu	GIn	116		Asp	Lys	116	ASP		Ala	
75					170					175					180		630
											gcc						0.30
78 79	Pne	ьуѕ	116	185	Ald	THE	ALd	Ald	190	Ald	Ala	PIO	1 111.	195	ASP.	Lys	
	t t a	200	ato		(12 C	- a+	aaa	tto		224	gcc	nta	aat		tac	aca	678
											Ala						070
83	rne	1111	200	rne	GIU	261	ALU	205	nan	цүз	nic	пси	210	OLU	CIS	1111	
	aac	auc		tat	aaa	acc	ťac		ttc	atc	ccc	tcc		gag	acc	aca	726
											Pro						
87	01.7	215		-1-	02.4	3. 11.4.	220	, 0				225	,,,,,,				
	atic		cag	acc	tac	acc		acc	atc	acc	qcc		ccc	gag	gtc	aaq	774
	**			**			-		-		Ala						
	230	- 1 -			-,-	235					240					245	
		acc	ate	ttt	gag	acc	qcq	ctq	acc	aaq	gcc	atc	acc	gcc	atg	acc	822
						-		-			Ala						
95	_				250					255					260		
97	cag	gca	cag	aag	gee	ggc	aaa	ccc	gct.	gcc	gcc	gct.	gcc	aca	ggc	gcc	870
											Ala						
99				265					270					275			
103	101 gca acc gtt gcc acc ggc gcc gca acc gcc gcc ggt gct gcc acc 918													918			
102 Ala Thr Val Ala Thr Gly Ala Ala Thr Ala Ala Ala Gly Ala Ala Thr																	
	1.03 280 285 290																
105 gec get get ggt gge tae aaa gee tgateagett getaatatae taetgaaegt 972													972				
				a Gly	. G12	Tyr		s Ala	1								
107		295					300	-									
																Lttcgt	
																catttc	
																accett	
	_					igg a	igtti	tatea	aa aq	gaati	ttati	: atı	caaaa	aaaa	aaaa	aaaaaa	
117 aaaaaaaaaa aaaaaaa 1229														1.429			
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121 <211> LENGTH: 301																	
122 <212> TYPE: PRT																	
123 <213> ORGANISM: Escherichia coli 125 <400> SEOUENCE: 2																	
						. ጥህን	Th:	r Val	Δ12	a 1.e.i	ı Phe	s [.e.i	. A1:	a Va	Al:	a Leu	
127			ı va	. 011	1 17 7 5	, 1 <u>1 1</u>	111.	. • •		1(2 220.0			1:		
			C1s	, Pro	. Ala	, Δ1ε	Sea	י איף	~ Ala			Ala	a Gly	z Ψv1		Pro	
1.30		LILL	. 01	20					2:			,		3(
		a Ala	a Ala			e Pro	A1a	a Thi			a Ala	a Thi	r Pro			a Ala	
133			35					4 (4 5		-		
		/ G1v			Thr	Thr	Ası			ı Lvs	s Let	ı Leı			val	l Asn	
136	-	50	_				5.5			•		6(
138	Ala	Gly	Phe	е Гуз	Ala	Ala	Va:	l. A1.a	Ala	a Ala	a Ala	ı Ası	n Ala	a Pro	o Pro) Ala	

RAW SEQUENCE LISTING DATE: 12/12/2000 PATENT APPLICATION: US/08/737,904G TIME: 12:20:09

Input Set : A:\Pto.amc
Output Set: N:\CRF3\12122000\H737904G.raw

70 139 65 141 Asp Lys Phe Lys Ile Phe Glu Ala Ala Phe Ser Glu Ser Ser Lys Gly 142 85 90 9.5 144 Leu Leu Ala Thr Ser Ala Ala Lys Ala Pro Gly Leu 11e Pro Lys Leu 145 100105105 147 Asp Thr Ala Tyr Asp Val Ala Tyr Lys Ala Ala Glu Gly Ala Thr Pro 148 115 120 125 148 115 150 Glu Ala Lys Tyr Asp Ala Phe Val Thr Ala Leu Thr Glu Ala Leu Arg 151 130 135 140 153 Val Ile Ala Gly Ala Leu Glu Val His Ala Val Lys Pro Ala Thr Glu 155 160 154 145 150 156 Glu Val Pro Ala Ala Lys Ile Pro Thr Gly Glu Leu Gln Ile Val Asp 157 165 170 175 159 Lys Ile Asp Ala Ala Phe Lys Ile Ala Ala Thr Ala Ala Asn Ala Ala 160 180 185 190 162 Pro Thr Asn Asp Lys Phe Thr Val Phe Glu Ser Ala Phe Asn Lys Ala 200 205 163 195 165 Leu Asn Glu Cys Thr Gly Gly Ala Tyr Glu Thr Tyr Lys Phe Ile Pro 166 210 215 168 Ser Leu Glu Ala Ala Val Lys Gln Ala Tyr Ala Ala Thr Val Ala Ala 169 225 230 235 171 Ala Pro Glu Val Lys Tyr Ala Val Phe Glu Ala Ala Leu Thr Lys Ala 172 245 250 255 174 Ile Thr Ala Met Thr Gln Ala Gln Lys Ala Gly Lys Pro Ala Ala Ala 175 260 265 270 177 Ala Ala Thr Gly Ala Ala Thr Val Ala Thr Gly Ala Ala Thr Ala Ala 178 275 280 180 Ala Gly Ala Ala Thr Ala Ala Ala Gly Gly Tyr Lys Ala 181 290 295 300 184 <210> SEQ ID NO: 3 185 <211> LENGTH: 20 186 <212> TYPE: PRT 187 <213> ORGANISM: Escherichia coli 189 <220> FEATURE: 190 <223> OTHER INFORMATION: all occurrences of Xaa=hydroxyproline 192 <400> SEQUENCE: 3 W--> 193 Ala Asp Ala Gly Tyr Thr Xaa Ala Ala Ala Ala Thr Xaa Ala Thr Xaa 194 1 W--> 196 Ala Ala Thr Xaa 200 <210> SEQ ID NO: 4 201 <211> LENGTH: 20 202 <212> TYPE: PRT 203 <213> ORGANISM: Escherichia coli 205 <220> FEATURE: 206 <223> OTHER INFORMATION: all occurrences of Xaa=hydroxyproline 208 <400> SEQUENCE: 4

W--> 209 Ala Thr Xaa Ala Thr Pro Ala Ala Thr Xaa Ala Ala Ala Gly Gly Lys

5

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TECH CENTER (500/2011)

 RAW SEQUENCE LISTING
 DATE: 12/12/2000

 PATENT APPLICATION: US/08/737,904G
 TIME: 12:20:09

Input Set : A:\Pto.amc

Output. Set: N:\CRF3\12122000\H737904G.raw

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218 <212> TYPE: PRT
219 <213> ORGANISM: Escherichia coli
221 <220> FEATURE:
222 <223> OTHER INFORMATION: all occurrences of Xaa =hydroxyproline
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226 1
228 Asp Val Asn Ala
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233 <211> LENGTH: 20
234 <212> TYPE: PRT
235 <213> ORGANISM: Escherichia coli
237 <400> SEQUENCE: 6
238 Glu Gln Lys Leu Leu Glu Asp Val Asn Ala Gly Phe Lys Ala Ala Val
                                 10
239 1
                     5
241 Ala Ala Ala Ala
242
            20
245 <210> SEQ ID NO: 7
246 <211> LENGTH: 16
247 <212> TYPE: PRT
248 <213> ORGANISM: Escherichia coli
250 <400> SEQUENCE: 7
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255 <210> SEQ ID NO: 8
256 <211> LENGTH: 20
257 <21.2> TYPE: PRT
258 <213> ORGANISM: Escherichia coli
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264 Glu Ser Ser Lys
265
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268 <210> SEQ ID NO: 9
269 <211> LENGTH: 20
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271 <213> ORGANISM: Escherichia coli
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275 1
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277 Ala Ala Lys Ala
278
              20
281 <210> SEQ ID NO: 10
282 <211> LENGTH: 20
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RAW SEQUENCE LISTING DATE: 12/12/2000 PATENT APPLICATION: US/08/737,904G TIME: 12:20:09

Input Set : A:\Pto.amc

Output Set: N:\CRF3\12122000\H737904G.raw

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284 <213> ORGANISM: Escherichia coli
286 <400> SEQUENCE: 10
287 Gly Leu Leu Ala Thr Ser Ala Ala Lys Ala Pro Gly Leu Ile Pro Lys
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288 1
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290 Leu Asp Thr Ala
291
294 <210> SEQ ID NO: 11
295 <211> LENGTH: 20
296 <212> TYPE: PRT
297 <213> ORGANISM: Escherichia coli
299 <400> SEQUENCE: 11
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303 Ala Ala Glu Gly
304
        2.0
307 <210> SEQ ID NO: 12
308 <211> LENGTH: 20
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310 <213> ORGANISM: Escherichia coli
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314 1
316 Tyr Asp Ala Phe
317
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321 <211> LENGTH: 20
322 <212> TYPE: PRT
323 <213> ORGANISM: Escherichia coli
325 <400> SEQUENCE: 13
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327 1
                    5
                                      1.0
329 Ala Leu Arg Val
               20
330
333 <210> SEQ TD NO: 14
334 <211> LENGTH: 20
335 <212> TYPE: PRT
336 <213> ORGANISM: Escherichia coli
338 <400> SEQUENCE: 14
339 Val Thr Ala Leu Thr Glu Ala Leu Arg Val Ile Ala Gly Ala Leu Glu
340 1
342 Val His Ala Val
343 . 20
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347 <211> LENGTH: 20
348 <212> TYPE: PRT
349 <213> ORGANISM: Escherichia coli
351 <400> SEQUENCE: 15
352 Ile Ala Gly Ala Leu Glu Val His Ala Val Lys Pro Ala Thr Glu Glu
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DEC 15 200K

TECH CENTER, 1600(2933)

ZF.Y.l.

<u>Please Note:</u>

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/08/737,904G

DATE: 12/12/2000 TIME: 12:20:10

Input Set : A:\Pto.amc

Output Set: N:\CRF3\12122000\H737904G.raw

L:193 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3 L:193 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3 L:193 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3 L:196 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3 L:196 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3 M:340 Repeated in SeqNo-3 L:209 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4 L:209 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4 $L:209\ M:340\ W:$ (46) "n" or "Xaa" used: Feature required, for SEQ ID#:4 L:560 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:31 L:560 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:31 L:560~M:340~W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:31 $\rm L:862~M:258~W:$ Mandatory Feature missing, <221> not found for SEQ 1D#:54 L:862 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:54 L:862 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:54L:865 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:54 L:865 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:54 M:340 Repeated in SeqNo=54 L:1073 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:59 L:1073 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:59 L:1073 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:59 L:1076 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:59 L:1076 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:59 M:340 Repeated in SeqNo=59 L:1089 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:60 I::1089 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:60 L:1089 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:60

1644

RAW SEQUENCE LISTING

DATE: 12/12/2000 TIME: 12:21:09

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PATENT APPLICATION: US/08/737,904G

EE 15 200

Input Set : A:\seqlist.txt Output Set: N:\CRF3\12122000\H737904G.raw

3 <110> APPLICANT: Griffith, Irwin J et al.

5 <120> TITLE OF INVENTION: T CELL EPITOPES OF RYEGRASS POLLEN ALLERGEN

7 <130> FILE REFERENCE: IMI-040CP3

9 <140> CURRENT APPLICATION NUMBER: 08/737,904G

10 <141> CURRENT FILING DATE: 1996-11-20

12 <150> PRIOR APPLICATION NUMBER: 08/106,016

1.3 <151> PRIOR FILING DATE: 1993-08-13

15 <160> NUMBER OF SEQ ID NOS: 61

17 <170> SOFTWARE: Patentin Ver. 2.0

TECH CENTER 1600/2000

Does Not Comply Corrected Diskette Needed

ERRORED SEQUENCES

1096 <210> SEQ ID NO: 61 1097 <211> LENGTH: 20 1098 <212> TYPE: PRT

1099 <213> ORGANISM: Escherichia coli

1101 <400> SEQUENCE: 61

1102 Ala Asp Ala Gly Tyr Thr Pro Ala Ala Ala Ala Thr Pro Ala Thr Pro

10

1105 Ala Ala Thr Pro 1106

1108 1 -> 1111 47

Delete end of file garbage

VERIFICATION SUMMARY

PATENT APPLICATION: US/08/737,904G

DATE: 12/12/2000 TIME: 12:21:10

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\12122000\H737904G.raw

L:193 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3 L:193 M:258 W: Mandatory Feature missing, <222> not found for SEO ID#:3 L:193 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:3 L:196 M:258 W: Mandatory Feature missing, <221> not found for SEO 1D#:3 L:196 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3 M:340 Repeated in SeqNo=3 L:209 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4 $L\colon\!209\ M\colon\!258\ W\colon\!$ Mandatory Feature missing, <222> not found for SEQ 1D#:4 L:209 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:4 L:560 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:31 L:560 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:31 L:560 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:31 L:862 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:54 L:862 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:54 L:862 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:54 L:865 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:54 L:865 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:54 M:340 Repeated in SeqNo=54 L:1073 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:59 L:1073 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:59 L:1073 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:59 L:1076~M:258~W: Mandatory Feature missing, <221> not found for SEQ ID#:59 L:1076 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:59 M:340 Repeated in SeqNo=59 L:1089 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:60 L:1089 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:60 L:1089 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:60 L:1108 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:61 M:332 Repeated in SeqNo=61 .